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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,990	02/05/2004	Roger H. Hoh	HOH.001A	5391
20995	7590	11/16/2005	EXAMINER	
KNOBBE MARTENS OLSON & BEAR LLP			COLLINS, TIMOTHY D	
2040 MAIN STREET			ART UNIT	
FOURTEENTH FLOOR			PAPER NUMBER	
IRVINE, CA 92614			3643	

DATE MAILED: 11/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/772,990

Applicant(s)

HOH, ROGER H.

Examiner

Timothy D. Collins

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-17 and 19-21 is/are pending in the application.
- 4a) Of the above claim(s) 3, 4, 12 and 22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 6-11, 13-17 and 19-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5/6/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Claims 3,4,12 and 22 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 8/30/05. Note that the claim 12 is readable on the nonelected species of a rate damper stability augmentation system. Also it is noted that the applicant appears to have chosen the species of an "attitude command attitude hold SAS", however made a typo in referring to "attitude" as "altitude". Claim 22 was previously withdrawn.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 20 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claims 20 recites the limitation "the cockpit flight controller" in line 2. There is insufficient antecedent basis for this limitation in the claim, because there is not any recitation of "a" cockpit flight controller previously. It appears the applicant is referring to the first means.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1,2, 6-11,13-17, and 19-21 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by USPN 4228386 to Griffith (hereinafter called 386).

a. Re claims 1 and 2, 386 discloses a feedback loop as seen in figure 3, a position sensor 60, flight control device (flight control computer and sas/afcs computer and commands) and servo actuator 32. Also 386 discloses attitude error feedback inherently when it is configured as an SAS.

b. Re claims 6-7, the trim switch is disclosed in column 3 at lines 64-66, where the pilot can adjust the trim.

c. Re claims 8-11,13 and 14, the details of these claims can be seen inherently in the reference in the functioning of the SAS.

d. Re claim 15, 386 discloses that the motor is configured to receive a signal from the flight control device proportional to the commanded force as seen in figure 2 through the gear drive system of the device, in that the motor will drive the system to create a proportional response.

e. Re claim 16, 386 discloses in figure 2 as well as in the specification that the device may be backdriven and gives "mechanical advantage".

f. Re claim 17, 386 discloses a clutch in number 20 of figure 2.

g. Re claims 19-21, 386 discloses a first means (stick 16), second means (synchro's) and third means (motor). The second means and position sensor measuring position of the first means and cockpit flight controller.

6. Claims 6-11,13-15,17,19 and 20 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by USPN 4345195 to Griffith et al. (hereinafter called 195).

a. Re claim 6, 195 discloses a position sensor (43), a flight control device (91 and 87) and an actuator 38.

b. Re claim 7, 195 discloses a trim switch in number 93 which is inherently a trim switch because it controls the trim of the device.

c. Re claims 8-11,13 and 14, 195 discloses that the device is an autopilot and SAS which inherently and in the spec of columns 7 and 8 disclose the features of the claims.

d. Re claim 15, 195 discloses that the motor is configured to receive a signal from the flight control device proportional to the commanded force as seen in figure 4 through the gear drive system of the device, in that the motor will drive the system to create a proportional response.

e. Re claim 17, 195 discloses a clutch in number 37 of figure 8.

f. Re claims 19 and 22, 195 discloses a first means (pilots controller as referred to in figure 3 at least), second means (43) and third means (38). The second means and position sensor measuring position of the first means and cockpit flight controller.

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7. Claims 1,6,19 and 20 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by USPN 4664346 to Koenig (hereinafter called 346).

g. Re claim 1, 346 discloses a feedback loop as seen in figure 3, a cockpit flight controller (1), a position sensor (5), a flight control device (electronics as seen in figure 3 to the left of the servo-motor, and a servo actuator designed to be backdriven as seen in figure 3 at number 3. Note that the examiner takes the statement in the pre-amble of the claim "which does not require a mechanical spring and trim-motor" to be non-limiting. It is suggested that the applicant include these limitations in the body of the claim in non-functional language. An example of this would be "wherein the force-feel system does not include a mechanical spring or a trim motor".

h. Re claim 6, see rejection of claim 1.

i. Re claim 19, see rejection of claim 1.

j. Re claim 20, see number 5 in figure 3 of 346.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art discloses feedback systems which are similar to those cited above.

k. USPN 3750984

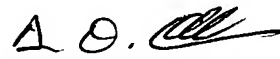
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy D. Collins whose telephone number is 571-272-

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6886. The examiner can normally be reached on M-F, 7:00-3:00, with every other Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter M. Poon can be reached on 571-272-6891. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Timothy D. Collins
Patent Examiner
Art Unit 3643


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